

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/585,817

DATE: 05/21/2003 TIME: 15:10:27 See page

Input Set : A:\015270-005910US.APP
Output Set: N:\CRF4\05212003\I585817.raw

```
3 <110> APPLICANT: Schenk, Dale B.
             Elan Pharmaceuticals
      6 <120> TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Diseases
      8 <130> FILE REFERENCE: 015270-005910US
     10 <140> CURRENT APPLICATION NUMBER: US 09/585,817
     11 <141> CURRENT FILING DATE: 2000-06-01
     13 <150> PRIOR APPLICATION NUMBER: WO PCT/US00/25239
     14 <151> PRIOR FILING DATE: 2000-06-01
     16 <150> PRIOR APPLICATION NUMBER: US 60/137,010
     17 <151> PRIOR FILING DATE: 1999-06-01
                                                                  ENTERED
     19 <160> NUMBER OF SEQ ID NOS: 34
     21 <170> SOFTWARE: PatentIn Ver. 2.1
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 13
     25 <212> TYPE: PRT
     26 <213> ORGANISM: Artificial Sequence
     28 <220> FEATURE:
     29 <223> OTHER INFORMATION: Description of Artificial Sequence:influenza
              hemagglutinin HA 307-319 universal T-cell epitope
     32 <400> SEQUENCE: 1
     33 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 13
     39 <212> TYPE: PRT
     40 <213> ORGANISM: Artificial Sequence
     42 <220> FEATURE:
     43 <223> OTHER INFORMATION: Description of Artificial Sequence: PADRE universal
     44
              T-cell epitope
     46 <220> FEATURE:
     47 <221> NAME/KEY: MOD RES
     48 <222> LOCATION: (3)
     49 <223> OTHER INFORMATION: Xaa = any amino acid
     51 <400> SEQUENCE: 2
W--> 52 Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala Ala
     53
        1
                                             10
    56 <210> SEO ID NO: 3
    57 <211> LENGTH: 16
    58 <212> TYPE: PRT
    59 <213> ORGANISM: Artificial Sequence
    61 <220> FEATURE:
```

62 <223> OTHER INFORMATION: Description of Artificial Sequence:malaria CS T3

epitope universal T-cell epitope

DATE: 05/21/2003

TIME: 15:10:27

Input Set : A:\015270-005910US.APP Output Set: N:\CRF4\05212003\I585817.raw 65 <400> SEQUENCE: 3 66 Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn Val . 10 70 <210> SEQ ID NO: 4 71 <211> LENGTH: 10 72 <212> TYPE: PRT 73 <213> ORGANISM: Artificial Sequence 75 <220> FEATURE: 76 <223> OTHER INFORMATION: Description of Artificial Sequence: Hepatitis B 77 surface antigen HBsAg 19-28 universal T-cell 78 epitope 80 <400> SEQUENCE: 4 81 Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile 82 1 85 <210> SEQ ID NO: 5 86 <211> LENGTH: 19 87 <212> TYPE: PRT 88 <213> ORGANISM: Artificial Sequence 90 <220> FEATURE: 91 <223> OTHER INFORMATION: Description of Artificial Sequence: heat shock protein 65 hsp65 153-171 universal T-cell epitope 94 <400> SEQUENCE: 5 95 Asp Gln Ser Ile Gly Asp Leu Ile Ala Glu Ala Met Asp Lys Val Gly 98 Asn Glu Gly 102 <210> SEQ ID NO: 6 103 <211> LENGTH: 14 104 <212> TYPE: PRT 105 <213> ORGANISM: Artificial Sequence 107 <220> FEATURE: 108 <223> OTHER INFORMATION: Description of Artificial Sequence:bacillus Calmette-Guerin universal T-cell epitope 111 <400> SEQUENCE: 6 112 Gln Val His Phe Gln Pro Leu Pro Pro Ala Val Val Lys Leu 113 116 <210> SEQ ID NO: 7 117 <211> LENGTH: 15 118 <212> TYPE: PRT 119 <213> ORGANISM: Artificial Sequence 121 <220> FEATURE: 122 <223> OTHER INFORMATION: Description of Artificial Sequence:tetanus toxoid TT 830-844 universal T-cell epitope 125 <400> SEQUENCE: 7 126 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu 127 10 130 <210> SEQ ID NO: 8 131 <211> LENGTH: 21 132 <212> TYPE: PRT 133 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/585,817

RAW SEQUENCE LISTING DATE: 05/21/2003 PATENT APPLICATION: US/09/585,817 TIME: 15:10:27

Input Set : A:\015270-005910US.APP
Output Set: N:\CRF4\05212003\I585817.raw

```
135 <220> FEATURE:
 136 <223> OTHER INFORMATION: Description of Artificial Sequence:tetanus toxoid
           TT 947-967 universal T-cell epitope
 139 <400> SEQUENCE: 8
 140 Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser
 141
      1
 143 Ala Ser His Leu Glu
 144
                  20
 147 <210> SEQ ID NO: 9
 148 <211> LENGTH: 16
 149 <212> TYPE: PRT
 150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV gp120 T1
          universal T-cell epitope
156 <400> SEQUENCE: 9
157 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
158 1
                                          10
161 <210> SEQ ID NO: 10
162 <211> LENGTH: 22
163 <212> TYPE: PRT
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Description of Artificial Sequence: AN90549 (Abeta
168
          1-7/tetanus toxoid 830-844 in a MAP4
169
          configuration)
171 <400> SEQUENCE: 10
172 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
173
      1
                       5
                                          10
175 Ile Gly Ile Thr Glu Leu
176
                  20
179 <210> SEQ ID NO: 11
180 <211> LENGTH: 28
181 <212> TYPE: PRT
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Description of Artificial Sequence: AN90550 (Abeta
186
          1-7/\text{tetanus} toxoid 947-967 in a MAP4
187
          configuration)
189 <400> SEQUENCE: 11
190 Asp Ala Glu Phe Arg His Asp Phe Asn Asn Phe Thr Val Ser Phe Trp
193 Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu
194
                 20
                                      25
197 <210> SEQ ID NO: 12
198 <211> LENGTH: 43
199 <212> TYPE: PRT
200 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
```

DATE: 05/21/2003

TIME: 15:10:27

```
Input Set : A:\015270-005910US.APP
                     Output Set: N:\CRF4\05212003\I585817.raw
     203 <223> OTHER INFORMATION: Description of Artificial Sequence: AN 90542 (Abeta
               1-7/\text{tetanus} toxoid 830-844 + 947-967 in a linear
     205
               configuration)
     207 <400> SEQUENCE: 12
     208 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
                                               10
     211 Ile Gly Ile Thr Glu Leu Phe Asn Asn Phe Thr Val Ser Phe Trp Leu
                     20
                                           25
     214 Arg Val Pro Lys Val Ser Ala Ser His Leu Glu
     215
                  35
     218 <210> SEQ ID NO: 13
     219 <211> LENGTH: 22
     220 <212> TYPE: PRT
     221 <213> ORGANISM: Artificial Sequence
     223 <220> FEATURE:
     224 <223> OTHER INFORMATION: Description of Artificial Sequence: AN 90576 (Abeta
               3-9/tetanus toxoid 830-844 in a MAP4
     226
               configuration)
     228 <400> SEQUENCE: 13
     229 Glu Phe Arg His Asp Ser Gly Gln Tyr Ile Lys Ala Asn Ser Lys Phe
     230
          1
     232 Ile Gly Ile Thr Glu Leu
     233
                      20
     236 <210> SEQ ID NO: 14
     237 <211> LENGTH: 20
     238 <212> TYPE: PRT
     239 <213> ORGANISM: Artificial Sequence
     241 <220> FEATURE:
     242 <223> OTHER INFORMATION: Description of Artificial Sequence: AN90562 (Abeta
               1-7/peptide on linear conformmation)
     245 <220> FEATURE:
     246 <221> NAME/KEY: MOD_RES
     247 <222> LOCATION: (3)
     248 <223> OTHER INFORMATION: Xaa = any amino acid
     250 <400> SEQUENCE: 14
W--> 251 Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala Ala Asp Ala Glu
     252 1
     254 Phe Arg His Asp
     255
     258 <210> SEQ ID NO: 15
     259 <211> LENGTH: 34
     260 <212> TYPE: PRT
     261 <213> ORGANISM: Artificial Sequence
     263 <220> FEATURE:
    264 <223> OTHER INFORMATION: Description of Artificial Sequence: AN90543 (Abeta
    265
               1-7 X 3/peptide in linear conformation)
    267 <220> FEATURE:
    268 <221> NAME/KEY: MOD RES
    269 <222> LOCATION: (24)
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/585,817

DATE: 05/21/2003

```
PATENT APPLICATION: US/09/585,817
                                                               TIME: 15:10:27
                      Input Set : A:\015270-005910US.APP
                      Output Set: N:\CRF4\05212003\I585817.raw
      270 <223> OTHER INFORMATION: Xaa = any amino acid
      272 <400> SEQUENCE: 15
      273 Asp Ala Glu Phe Arg His Asp Asp Ala Glu Phe Arg His Asp Asp Ala
                                                10
W--> 276 Glu Phe Arg His Asp Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala
     277
     279 Ala Ala
     283 <210> SEQ ID NO: 16
     284 <211> LENGTH: 34
     285 <212> TYPE: PRT
     286 <213> ORGANISM: Artificial Sequence
     288 <220> FEATURE:
     289 <223> OTHER INFORMATION: Description of Artificial Sequence: fusion protein
               with Abeta immunogenic epitope
     292 <220> FEATURE:
     293 <221> NAME/KEY: MOD RES
     294 <222> LOCATION: (3)
     295 <223> OTHER INFORMATION: Xaa = any amino acid
     297 <400> SEQUENCE: 16
W--> 298 Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala Ala Asp Ala Glu
     301 Phe Arg His Asp Asp Ala Glu Phe Arg His Asp Asp Ala Glu Phe Arg
     302
                      20
     304 His Asp
     308 <210> SEQ ID NO: 17
     309 <211> LENGTH: 20
     310 <212> TYPE: PRT
     311 <213> ORGANISM: Artificial Sequence
     313 <220> FEATURE:
     314 <223> OTHER INFORMATION: Description of Artificial Sequence: fusion protein
     315
               with Abeta immunogenic epitope
     317 <220> FEATURE:
     318 <221> NAME/KEY: MOD RES
     319 \langle 222 \rangle LOCATION: (10)
     320 <223> OTHER INFORMATION: Xaa = any amino acid
     322 <400> SEQUENCE: 17
W--> 323 Asp Ala Glu Phe Arg His Asp Ala Lys Xaa Val Ala Ala Trp Thr Leu
     324
     326 Lys Ala Ala Ala
     327
     330 <210> SEQ ID NO: 18
     331 <211> LENGTH: 24
    332 <212> TYPE: PRT
    333 <213> ORGANISM: Artificial Sequence
     335 <220> FEATURE:
    336 <223> OTHER INFORMATION: Description of Artificial Sequence: fusion protein
    337
               with Abeta immunogenic epitope
    339 <400> SEQUENCE: 18
    340 Asp Ala Glu Phe Arg His Asp Ile Ser Gln Ala Val His Ala Ala His
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/585,817

DATE: 05/21/2003 TIME: 15:10:28

Input Set : A:\015270-005910US.APP

Output Set: N:\CRF4\05212003\I585817.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 3

Seq#:14; Xaa Pos. 3

Seq#:15; Xaa Pos. 24

Seq#:16; Xaa Pos. 3

Seq#:17; Xaa Pos. 10

Seq#:32; Xaa Pos. 2

Seq#:33; Xaa Pos. 1

VERIFICATION SUMMARY

DATE: 05/21/2003 TIME: 15:10:28 PATENT APPLICATION: US/09/585,817

Input Set : A:\015270-005910US.APP

Output Set: N:\CRF4\05212003\I585817.raw

L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0 L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0 L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16 L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0 L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0 L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0